

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application.

COMPLETE LISTING OF THE CLAIMS:

Claim 1 : (Currently Amended) An arrangement for electro-optically reading indicia having parts of different light reflectivity, comprising:

a) a variable optical lens having a pair of light-transmissive liquids arranged along an optical path, the liquids being immiscible, of different optical indices of refraction, and of substantially same density, one of the liquids having a shape in a rest state for optically modifying light passing through said one liquid along the optical path toward the indicia to have a first optical characteristic, the variable lens having a well in which said one liquid is accommodated in symmetrical relation relative to the optical path, and the variable lens further having at least one fixed focal lens spaced apart from the liquids along the optical path; and

b) a controller for applying a voltage across said one liquid to change the shape thereof in the well, and for optically modifying the light to have a second different optical characteristic.

Claim 2 : (Previously Presented) The arrangement of claim 1; and a light source for emitting the light to the variable lens; and wherein the first and the second optical characteristics are different focal planes spaced apart along the optical path at different working distances relative to the variable lens.

Claim 3 : (Previously Presented) The arrangement of claim 2, wherein the light source is a laser for emitting the light as a laser beam.

Claim 4 : (Previously Presented) The arrangement of claim 1; and a sensor for receiving the light from the variable lens; and wherein the first and the second optical characteristics are different imaging planes spaced apart along the optical path at different working distances relative to the variable lens.

Claim 5 : (Previously Presented) The arrangement of claim 4, wherein the sensor is an array of imaging cells.

Claim 6 : (Previously Presented) The arrangement of claim 1; and a scanner for scanning at least one of the light, and a field of view, over the indicia.

Claim 7 : (Previously Presented) The arrangement of claim 6, and wherein the controller is operative for continuously applying the voltage as a periodic voltage during scanning.

Claim 8 : (Previously Presented) The arrangement of claim 6; and an analyzer for determining whether the indicia was successfully scanned and read, and wherein the controller is operative for applying the voltage upon a determination that the indicia was not successfully scanned and read.

Claim 9 : (Previously Presented) The arrangement of claim 1, wherein said one liquid is electrically insulating, and wherein the other of the liquids is electrically conductive, and wherein a first electrode is disposed at one side of said one liquid, and wherein a second electrode is immersed in said other liquid at an opposite side of said one liquid, and wherein the voltage is applied across the electrodes.

Claim 10 : (Canceled)

Claim 11 : (Previously Presented) The arrangement of claim 1, wherein there are two fixed focal lenses having positive and negative optical powers respectively, and wherein the two fixed focal lenses are located at opposite ends of the variable lens.

Claim 12 : (Previously Presented) The arrangement of claim 9, wherein the variable lens has an electrically insulating wall on which said one liquid rests, and wherein the second electrode contacts the insulating wall.

Claim 13 : (Previously Presented) The arrangement of claim 1, wherein said one liquid is radially symmetrical about the optical path in the rest state.

Claim 14 : (Previously Presented) The arrangement of claim 1, wherein said one liquid extends along a transverse axis generally perpendicular to the optical path and optically modifies a cross-section of the light passing through said one liquid.

Claim 15 : (Currently Amended) A method of electro-optically reading indicia having parts of different light reflectivity, comprising the steps of:

a) arranging a pair of light-transmissive liquids along an optical path to form a variable optical lens, the liquids being immiscible, of different optical indices of refraction, and of substantially same density, one of the liquids having a shape in a rest state for optically modifying light passing through said one liquid along the optical path toward the indicia to have a first optical characteristic, accommodating said one liquid in a well in symmetrical relation relative to the optical path, and mounting at least one fixed focal lens on the variable lens in spaced apart relation relative to the liquids along the optical path; and

b) applying a voltage across said one liquid to change the shape thereof in the well, and optically modifying the light to have a second different optical characteristic.

Claim 16 : (Previously Presented) The method of claim 15, and the step of emitting the light to the variable lens; and wherein the first and the second optical characteristics are different focal planes spaced apart along the optical path at different working distances relative to the variable lens.

Claim 17 : (Previously Presented) The method of claim 15, and the step of receiving the light from the variable lens; and wherein the first and the second optical characteristics are different imaging planes spaced apart along the optical path at different working distances relative to the variable lens.

Claim 18 : (Previously Presented) The method of claim 15, and the step of scanning at least one of the light, and a field of view, over the indicia.

Claim 19 : (Previously Presented) The method of claim 18, and the step of continuously applying the voltage as a periodic voltage during scanning.

Claim 20 : (Previously Presented) The method of claim 18, and the step of determining whether the indicia was successfully scanned and read, and the step of applying the voltage upon a determination that the indicia was not successfully scanned and read.